



# Analysis of basic shooting technique abilities in Soccer games

Muhammad Rusli<sup>1ABCD\*</sup>, Jud<sup>2ACDE</sup>, Marsuna<sup>3BCED</sup>

1, 2, 3, 4, 5 Physical Education, Faculty of Education and Teacher Training, Universitas Halu Oleo

Authors' Contribution: A – Study Design, B – Data Collection, C – Statistical Analysis, D – Manuscript Preparation, E – Funds Collection

**Abstract:** This study was conducted for several reasons. Some students have bad experiences understanding and applying the correct basic shooting techniques. Moreover, a lack of adequate practice or understanding of the technique can cause it. Besides, students have trouble maintaining consistency when implementing basic shooting techniques. Some factors, such as physical fatigue, lack of concentration, or lack of regular exercise, can cause it. Thus, this research aimed to analyze basic shooting technical abilities in soccer games. This research applied quantitative research involving 30 high school students actively participating in extracurricular activities as the research participants. The instrument was the shooting test. The data analysis technique used descriptive statistics entered predetermined categories. The categorization was grouped into 5: excellent, good, fair, poor, and very poor. Then, the data were entered into the data processing technique in percentages. The results show that students' basic shooting technical abilities were in a good category, with a percentage of 40%, and the lowest is 3%. From the results of research on basic skills in soccer shooting techniques, several main points were concluded, namely that from the sample size, most students (53%) were still in the category of basic skills in good shooting techniques. Students who fall into the poor and very poor categories need special attention and extra guidance to improve their abilities in basic shooting techniques.

**Keywords:** analysis; abilities of basic shooting techniques; soccer games

\*Corresponding author: Muhammad Rusli, email: [muhrusli@uho.ac.id](mailto:muhrusli@uho.ac.id)



## INTRODUCTION

Football is the most popular sport in the world, it has united millions of people from various backgrounds, cultures, and countries (Jud & Sariul, 2022; Rusli, 2021). Each match not only triggers fans' emotions but also shows the beauty of the sport itself, with exciting technical and tactical skills (Sobko et al., 2023). Football is a complex combination of individual skills (Arridho et al., 2021; Irfan et al., 2020). From ball shooting techniques to in-depth tactical understanding, every aspect of the game plays an important role in determining the outcome. At the professional level, soccer players are expected to have a wide range of skills, including the ability to control the ball, take accurate shots, read the game, and work together with teammates (Rahman & Padli, 2020; Marsuna et al., 2024). However, not only is football a competitive sport, football is also a strong tool for promoting unity, friendship, and togetherness among players and fans (Agustina, 2020). Football, as a dynamic and fast-paced sport, requires a deep understanding of various basic techniques. Every player, from beginners to professionals, must master the basic skills necessary to participate in the game effectively (Aprilianto et al., 2022; Muhammad, 2022; Suharto et al., 2024). In the world of football, basic techniques form a strong foundation for individual and overall team abilities. From how to control the ball to accurate shooting techniques, every movement plays an important role in achieving success on the field. At the beginner level, understanding basic techniques is key to building a solid foundation in a player's development. Meanwhile, more experienced players continue to refine and perfect basic skills through structured and repetitive practice.

The ability to shoot well is a very important aspect. Precise and accurate shooting can make the difference between victory and defeat in a match. Therefore, a deep understanding of basic shooting techniques is very crucial for every player. By understanding basic shooting techniques, players will be able to improve their ability to score goals and contribute significantly to the team's success (Jusran, 2021; Lamungga et al., 2020). Apart from that, understanding basic shooting techniques can also help in developing effective and meaningful training strategies for coaches. Basic shooting technical abilities in football refer to the skills and expertise needed to make accurate and effective shots towards the opponent's goal. Where the right body position is very important in basic shooting techniques. Players must have good balance and appropriate foot position before taking a shot (Gonzalez-Rodenas et al., 2020). The ability to control the ball well before taking a shot is a key aspect of basic shooting technique.

Players must be able to control the ball and place it in the right position to make an effective shot. It covers a variety of shooting techniques, including inside foot, outside foot shots. Players must master these techniques to be able to make accurate and powerful shots (Sawali, 2021). Players must understand the proper angle and speed required for their shot depending on their position on the field and the position of the opposing goalkeeper. Players must be able to make quick decisions about when and where to take a shot. This involves assessing the situation on the ground and making quick and appropriate decisions (Rajidin, 2023).

The ability to shoot well is a key factor in scoring goals, which ultimately determines the outcome of the match (Rahmat et al., 2023). A good understanding of basic shooting techniques is necessary for the development of young players. Through in-depth research, coaches can design appropriate training programs to help young players acquire the skills necessary for success on the field (Belhaj, 2023). An understanding of basic shooting techniques can also help in preventing injuries. By knowing the correct way to shoot, players can reduce the risk of injury caused by inappropriate or unnatural movements (Afrinaldi et al., 2021). For players who want to improve their performance in the game, a deeper understanding of basic shooting techniques can help achieve their goals. By understanding the techniques needed to shoot well, players can improve their abilities significantly. Research on basic shooting techniques is also an important part of overall sports research (Suharto et al., 2024). Through ongoing research, we can continue to deepen our understanding of certain aspects of the game, which in turn can help advance the sport of soccer.

The basic shooting technique is that you can utilize data analysis techniques and machine learning to identify patterns in shooting techniques that are not detected directly by human observers. By using sensors and cameras installed on the court, this system can provide in-depth insight into the factors that influence shooting success and can shift the focus from just the technical aspects of shooting to a more thorough understanding of the factors that influence a player's performance. This can include psychological aspects such as concentration and self-confidence, as well as physical aspects such as strength and flexibility. By strengthening all of these components together, players can optimize their abilities in basic shooting techniques.

The problem that occurs in analyzing the ability of basic shooting techniques in soccer games is that some students have trouble in understanding and applying the correct basic shooting techniques. This can be caused by a lack of adequate practice or a lack of deep

understanding of the technique (Sarifudin et al., 2023). Students experience difficulty in maintaining consistency in implementing basic shooting techniques. This can be caused by factors such as physical fatigue, lack of concentration, or lack of consistent exercise. Although students can perform basic shooting techniques well in practice, they have difficulty applying them effectively in real game situations. This could be caused by psychological pressure or lack of experience in dealing with different game situations (Sinatriyo et al., 2020; Hasrion et al., 2020). Some students do not understand the importance of critical skills in basic shooting techniques, such as proper body alignment, correct use of the feet, and quick decision making. This can affect their ability to perform basic shooting techniques effectively. Motivational factors can also influence students' ability to develop basic shooting techniques. Lack of support and guidance from coaches or teachers can also be a factor that influences students' ability to develop basic shooting techniques. Students need good guidance and constructive feedback to improve skills.

Some solutions that can be applied to overcome these problems are designing a structured and targeted training program that focuses on developing basic shooting techniques. The training program should include gradual exercises, starting from basic techniques to more complex game situations. Provide clear and constructive feedback to students regarding the implementation of basic shooting techniques. Feedback should be specific, positive, and help students to correct mistakes. Increase student motivation by creating a supportive environment and generating a competitive spirit. This can be done through giving awards, recognizing achievements, or creating interesting challenges. Integrate game simulation exercises into the training program to help students develop the ability to apply basic shooting techniques in real game situations. Places special emphasis on developing critical skills required in basic shooting techniques, such as body balance, foot setting, and quick decision making. This can be done through specific exercises and discussion of the concepts. By applying these solutions consistently and in a coordinated manner, it is hoped that students will be able to overcome the problems they face in developing basic shooting technical skills in the game of soccer.

## **MATERIAL AND METHODS**

This research is a type of quantitative research, carried out at SMA Negeri 24 South Konawe, Lainya District, Southeast Sulawesi. The population in this study was 30 students who actively participated in extracurricular activities, so the sampling process was carried out

using a total sampling technique, meaning that the entire population used as a research sample was 30 students. The instrument used is the shooting test, the instructions for implementation are the sample standing on the back of the ball which is placed at a point 16.5 meters in front of the goal area, then kicking the ball into the goal with the target 2 times. A failed movement is that the ball leaves the target area (Nurhasan, 2001). The data analysis technique uses descriptive statistics in collecting data, then in this analysis it is entered into predetermined categories. The categorization is grouped into 5, namely very good, good, fair, poor and very poor. And then it is entered into the data processing technique in percentage terms (Sugiyono, 2017).

## RESULTS

The results of the descriptive analysis of basic shooting technical abilities in soccer games can be seen in the following table.

**Table 1.** Analysis of basic football shooting technique ability results

Information	Student Analysis Results
Mean	13.12
Median	14
Mode	14
Standard Deviation	4.15
Maximum Score	18
Minimum Score	3

Based on the results of the descriptive analysis, the mean value was 13.12, the median value was 14, the mode value was 14, the standard deviation value was 4.15, the maximum score was 18, and the minimum score was 3. From the results above it can be explained into categories as follows:

**Table 2.** Categories of basic football shooting technique ability results

Score	Category	Frequency	Percentage
$18.37 \leq X$	Very well	4	13%
$14.21 \leq X < 18.21$	Good	12	40%
$11.92 \leq X < 14.21$	Enough	1	3%
$5.89 \leq X < 11.92$	Not enough	11	37%
$X < 5.89$	Very less	2	7%
Total		30	100%

From the results above, it can be seen that there are 4 students in the excellent category with a percentage of 13%, and a score of  $18.37 \leq$  There was 1 student in the sufficient category with a percentage of 3%, and a score of  $11.92 \leq X < 14.21$ . There were 11 students in the underprivileged category with a percentage of 37%, and a score of  $5.89 \leq X < 11.92$ . There were 2 students in the very poor category with a percentage of 7%, and a score of  $X < 5.89$ . Based on the results above, the analysis of basic shooting technical abilities is in the good category with a percentage of 40%, and the lowest is 3%.

This research analyzes the ability of basic shooting techniques in the game of soccer. Each student is given a shooting test based on the targets that must be achieved. After carrying out the test the results are analyzed as to how many students get very good, good, sufficient, insufficient and very poor scores. Based on the results achieved by this research, it is in the good category with a score of 40% achieved by 12 students. These results are explained in the histogram below:

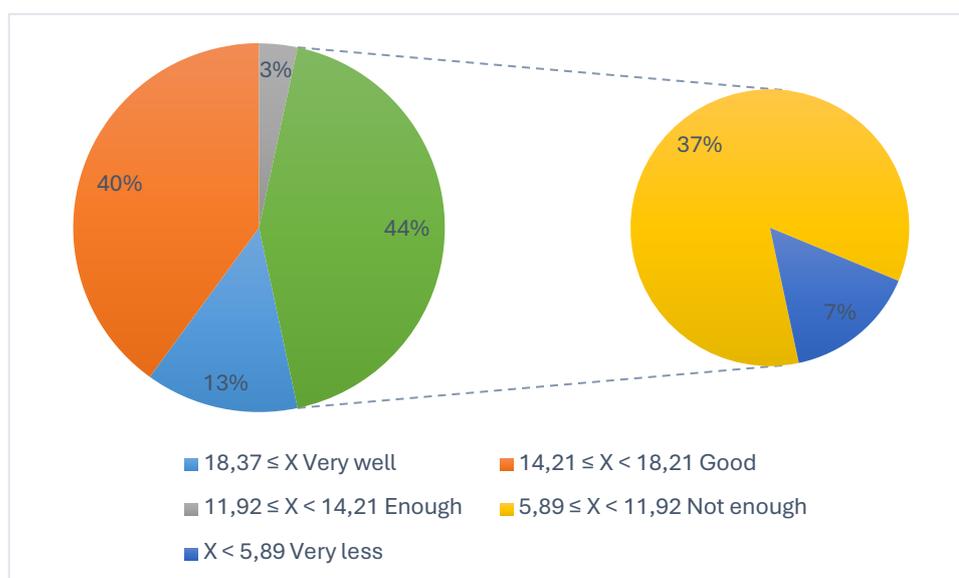


Figure 1. Histogram of skill analysis of basic football shooting techniques

## DISCUSSION

The research results show that most students have varying levels of ability in basic shooting techniques. From these results, we can draw the conclusion that regular ability evaluations are important to understand where students are in their ability range. This research identified that most students were in the good or above category, but there were still a few

students who were in the poor or very poor category. This highlights the need to identify specific areas of improvement for these students to develop their abilities to the maximum. According to Anugrarista, (2020), The results of this research have direct implications in the development of soccer training programs. Identifying the abilities of individual students allows trainers to design more targeted and relevant exercises according to each student's needs. These findings emphasize the importance of individual coaching in sports, where special attention is given to students who are in the poor or poor categories.

Individual coaching can help students overcome their weaknesses and improve their basic shooting techniques. The results of this research also have important implications in the context of improving team performance. By understanding an individual's level of ability in basic shooting techniques, coaches can direct their efforts to improve overall team performance. This research provides a strong foundation for the development of more effective and targeted training plans. By understanding students' strengths and weaknesses in basic shooting techniques, coaches can develop more specific and useful exercises (Septiadi et al., 2019).

This research is supported by research conducted by Syahrana & Nurhidayat, (2022), with the title analysis of shooting and passing abilities in soccer games, these results have similarities, namely researching shooting abilities, the difference lies in the sample size, namely only 20 people and the results of the analysis falls into the medium category with a percentage of 50%. Furthermore, it is supported by Hasanuddin, (2023), with the title analysis of shooting ability in soccer games. These results have differences, namely the sample size is 20 people, and the results of the research analysis are in the medium category with a percentage of 60%. Based on the results of data analysis, it can be concluded that the results of the research carried out have similarities, namely researching shooting ability, the difference lies in the resulting category, namely this research is in the good category with a percentage of 40%.

This research was conducted with a limited number of participants or samples. This can reduce the representation of the population, so that the results cannot be accurately applied to the larger population. Basic shooting technical abilities are subjective, especially if carried out by one or several assessors. This subjectivity can affect the consistency and validity of research results. Many external factors can influence research results, such as weather conditions, field conditions, or the participant's physical fitness level. According to Juhanis et al., (2023), The inability to control or consider these factors may reduce the internal validity of the study. Measuring basic shooting technique abilities may not cover all relevant aspects. For example,

measurements only focus on kick accuracy without considering other factors such as kick speed, positional accuracy, or proper use of the feet. Basic shooting technique abilities can be influenced by previous training and experience which may not be fully measured or controlled for in this study. This can result in differences in abilities that may not fully reflect the effects of the intervention or treatment being studied.

Future research could expand its sample size to increase representation of a broader population. This can provide more reliable results and stronger generalizations. Future research can use more comprehensive measurement methods to measure basic shooting technique abilities, including measuring speed, strength and kick accuracy. This can provide a more complete picture of students' basic shooting technique abilities. Future research can consider external factors such as weather conditions, field conditions, and physical fitness level in its research design. This can help control unwanted variability and increase the validity of the results. Using a longitudinal design to monitor the development of basic shooting technique abilities over time. This can provide a better understanding of changes in basic shooting technical abilities over time and the factors that influence them. Can be focused on the effect of certain interventions or exercises on basic shooting technique abilities. This can help in the development of more effective training programs to improve students' basic shooting technique abilities. Carry out further analysis of the factors that influence basic shooting technical abilities, such as age, gender, playing experience and level of physical fitness. This can help in identifying the variables that most influence those abilities. Based on considering the suggestions above, further research can make a greater contribution to the understanding of basic shooting technical abilities in football and assist in the development of more effective training programs to improve student performance.

## **CONCLUSION**

Based on the analysis of basic shooting technical abilities in football from the research results, several main points can be concluded, namely that from the total sample, most students (53%) are still in the good category in basic shooting technical abilities. This suggests it needs a room for improvement in training and understanding of the technique. There were variations in student performance, with a few students achieving the categories very good, good, fair, poor, and very poor. This highlights the importance of recognizing individual differences and individualizing exercise programs. Students who fall into the poor and very poor categories need

special attention and extra guidance to improve their abilities in basic shooting techniques. It is important for coaches to develop training programs that suit each student's ability level and provide the necessary support and guidance to help them reach their full potential. Regular evaluation of student abilities and ongoing adjustments to training programs will help improve the quality of basic shooting techniques in the long term.

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